

Society of American Foresters

Forest management and Climate Change

There is growing evidence that our climate is changing, with changes in temperature associated with increasing concentrations of atmospheric carbon dioxide (CO₂) and other GHGs in the atmosphere. Unique among all possible remedies, forests can reduce GHG emissions and atmospheric GHGs, while simultaneously providing essential environmental and social benefits, including clean water, wildlife habitat, recreation, forest products, and other values and uses.

Forests play a significant role in stabilizing the Earth's climate and prudent management will enhance that role. Forest management can mitigate climate change effects and, in so doing, provide a bridge to resolve the broader question of reducing the nation's dependence on imported fossil fuels.

Climate change policies should recognize that forests can: 1) reduce GHG concentrations by sequestering atmospheric carbon in forest biomass and soil; 2) reduce greenhouse gas (GHG) emissions through the use of wood products (in lieu of non-renewable building materials), forest biomass energy (in lieu of fossil fuel-based energy sources), modification of wildfire behavior, and avoided land-use change, and by storing carbon in wood products made from harvested trees.

We urge you to consider:

- Using forest biomass for energy can offset use of coal, natural gas, gasoline, diesel, and fuel oil. At the same time, its use can enhance domestic economic development by fostering new industries making bio-based products.
- Forests can also reduce GHG concentrations by sequestering atmospheric carbon in biomass and soil, and the carbon can remain stored in any wood products made from harvested trees. Because the area of US forests is so vast—33 percent of the land base—even small increases in carbon sequestration and storage per acre add up to substantial quantities.
- Reducing wildland fires, a major source of GHG emissions, prevents the release of carbon stored in forests. Active forest and wildland fire management strategies can dramatically reduce CO₂ emissions while also conserving wildlife habitat, preserving recreational, scenic, and wood product values, and reducing the threat of wildfires to communities and critical infrastructure.
- Products from sustainably managed forests can be replenished continually, providing a dependable supply while supporting other ecological services, such as clean water, clean air, wildlife habitat, and recreation.
- More carbon is stored in forests than in agricultural or developed land. Preventing land-use change from forests to non-forest uses is thus another way to reduce GHGs.